

In the Claims:

1. (Currently Amended) A computer based method for supplying comparative information about at least two specified items out of a group of items belonging to any one category, each item of the group having a corresponding data entry in the computer's storage, the data entry including a name, at least one topic and information associated with each topic, said information including at least one value, the method comprising:

retrieving from storage data entries corresponding to the specified items;

among said retrieved entries comparing information associated with like topics;

[[and]]

constructing one or more natural language sentences that reflect results of said retrieving and said comparing, by steps including:

providing a plurality of natural language sentence templates, whereby each possible combination of a topic and category of items is associated with a particular template, and

inserting names, topics and values resulting from said comparing into appropriate respective fields in an appropriate one of said templates; and

presenting said natural language sentences to a user at a display;

wherein not all stored data entries of any group necessarily include identical topics

and said comparing includes comparing values associated with like topics, if any;

wherein said comparing includes, for any topic common to at least two of the retrieved entries -

(i) finding within said at least two of the retrieved entries any values that are mutually equal, grouping all items that correspond to any thus identified value

together as a similarity group, noting their names and associating said group with said common topic and with said equal value; and

(ii) if no equal values are found, noting the names and values of all corresponding items, in association with said common topic;

wherein said constructing includes constructing a natural language statement for each of said common topics which reflects respective results of substep (i) or substep (ii);

the method further comprising:

(iii) identifying any topic that is not common to any two or more of the retrieved entries, and noting one or more values associated with the thus identified topic in the respective entry, together with the respective name; and

(iv) constructing a natural language statement that includes the name, topic and values noted in substep (iii).

2. (Original) The method of claim 1, wherein there are also specified topics and said comparing is confined to the specified topics.

3-5. (Canceled)

6. (Original) The method of claim 1, further comprising, for any item in any similarity group -

(v) finding in the corresponding retrieved entry one or more values, if any, associated with the respective topic, that are different from the respective common value and noting any thus found value in association with the respective name and the respective topic; and

(vi) constructing a natural language statement that includes the name and values noted in substep (v) and appending it to the statement that reflects results of substep (i) with respect to the noted topic.

7-10. (Canceled)

11. (Original) The method of claim 22, wherein any of the relational words refers to one end of the range of values as being better or preferred relative to the other end.

12. (Original) The method of claim 22, wherein any of the relational words refers to one or more values that are between the extremes of the range.

13-15. (Canceled)

16. (Original) The method of claim 23, wherein at least one topic is fuzzy and at least one topic has one or more values associated therewith and wherein said plurality of statements includes at least one statement relating to a fuzzy topic and at least one statement relating to one or more values.

17. (Original) The method of claim 22, further comprising creating in the computer storage a data entry, corresponding to any item for which such an entry does not exist, the data entry including -
a name,
at least one topic, at least one of which is a fuzzy topic,
and, associated with any fuzzy topic, a position number.

18. (Currently Amended) A program storage device readable by a computer, ~~tangibly embodying~~ having embodied in a computer readable medium a program of instructions executable by the computer to perform method steps for supplying comparative information about at least two specified items out of a group of items belonging to any one category; each item of the group having a corresponding data entry in the computer's storage, the data entry including a name, at least one topic and information associated with each topic, said information including at least one value, the method steps comprising:

retrieving from storage data entries corresponding to the specified items;

among said retrieved entries comparing information associated with like topics; and

constructing one or more natural language sentences that reflect results of said

retrieving and said comparing, by steps including:

providing a plurality of natural language sentence templates, whereby each possible combination of a topic and category of items is associated with a particular template,

and

inserting names, topics and values resulting from said comparing into appropriate respective fields in an appropriate one of said templates;

wherein not all stored data entries of any group necessarily include identical topics

and said comparing includes comparing values associated with like topics, if any;

wherein said comparing includes, for any topic common to at least two of the retrieved entries -

(i) finding within said at least two of the retrieved entries any values that are mutually equal, grouping all items that correspond to any thus identified value together as a similarity group, noting their names and associating said group with said common topic and with said equal value; and

(ii) if no equal values are found, noting the names and values of all corresponding items, in association with said common topic;

wherein said constructing includes constructing a natural language statement for each of said common topics which reflects respective results of substep (i) or substep (ii); the method further comprising:

(iii) identifying any topic that is not common to any two or more of the retrieved entries, and noting one or more values associated with the thus identified topic in the respective entry, together with the respective name; and

(iv) constructing a natural language statement that includes the name, topic and values noted in substep (iii).

19. (Original) The storage device of claim 18, wherein not all stored data entries of any group necessarily include identical topics and said comparing includes comparing values associated with like topics, if any.

20. (Original) The storage device of claim 18, wherein -
any topic is associated with a range of values, extending between two extreme values, and with a numerical scale whose minimum and maximum values correspond to respective extreme values of the range, such a topic being a fuzzy topic;
in any data entry, the information associated with any fuzzy topic includes a position number within the respective scale, which number corresponds to a value within the respective range; and
said comparing includes, with respect to any fuzzy topic, comparing the respective position numbers.

21. (Currently Amended) A computer program product comprising a computer ~~useable~~ readable medium having computer readable program code embodied therein for supplying comparative information about at least two specified items out of a group of items belonging to any one category, each item of the group having a corresponding data entry in the computer's storage, the data entry including a name, at least one topic and information associated with each topic, said information including at least one value, the computer program product comprising:

computer readable program code for causing the computer to retrieve from storage data entries corresponding to the specified items;

computer readable program code for causing the computer to compare, among said retrieved entries, information associated with like topics; and

computer readable program code for causing the computer to construct one or more natural language sentences that reflect results of said retrieving and said comparing, by steps including:

providing a plurality of natural language sentence templates, whereby each possible combination of a topic and category of items is associated with a particular template, and

inserting names, topics and values resulting from said comparing into appropriate respective fields in an appropriate one of said templates;

wherein not all stored data entries of any group necessarily include identical topics and said comparing includes comparing values associated with like topics, if any;

wherein said comparing includes, for any topic common to at least two of the retrieved entries -

(i) finding within said at least two of the retrieved entries any values that are mutually equal, grouping all items that correspond to any thus identified value

together as a similarity group, noting their names and associating said group with said common topic and with said equal value; and

(ii) if no equal values are found, noting the names and values of all corresponding items, in association with said common topic;

wherein said constructing includes constructing a natural language statement for each of said common topics which reflects respective results of substep (i) or substep (ii);

the method further comprising:

(iii) identifying any topic that is not common to any two or more of the retrieved entries, and noting one or more values associated with the thus identified topic in the respective entry, together with the respective name; and

(iv) constructing a natural language statement that includes the name, topic and values noted in substep (iii).

22. (Currently Amended) A computer based method for supplying comparative information about at least two specified items out of a group of items belonging to any one category, each item of the group having a corresponding data entry in the computer's storage, the data entry including a name, at least one topic and information associated with each topic, said information including at least one value, the method comprising:

retrieving from storage data entries corresponding to the specified items;

among said retrieved entries comparing information associated with like topics;

[[and]]

constructing one or more natural language sentences that reflect results of said

retrieving and said comparing, by steps including:

providing a plurality of natural language sentence templates, whereby each possible combination of a topic and category of items is associated with a particular template, and

inserting names, topics and values resulting from said comparing into appropriate respective fields in an appropriate one of said templates; and

presenting said natural language sentences to a user at a display;

wherein -

any topic is associated with a range of values, extending between two extreme values, and with a numerical scale whose minimum and maximum values correspond to respective extreme values of the range, such a topic being a fuzzy topic;

in any data entry, the information associated with any fuzzy topic includes a position number within the respective scale, which number corresponds to a value within the respective range; and

said comparing includes, with respect to any fuzzy topic, comparing the respective position numbers;

wherein said comparing includes, with respect to any fuzzy topic, finding among said retrieved entries the highest and lowest position values, dividing the values between them into one or more identifiable subranges, associating each item with one of said subranges according to the corresponding position value and grouping all items according to their associated subranges, noting their respective names and noting for each group its respective subrange and the common topic; and

wherein any fuzzy topic is further associated with a set of relational words, appropriate to its range of values, and wherein said constructing includes constructing, for any noted topic, natural language statements containing noted names, and relational words that reflect positions of respective noted subranges

relative to each other or relative to said highest and lowest position values or relative to said scale.

23. (Currently Amended) A computer based method for supplying comparative information about at least two specified items out of a group of items belonging to any one category, each item of the group having a corresponding data entry in the computer's storage, the data entry including a name, at least one topic and information associated with each topic, said information including at least one value, the method comprising:

retrieving from storage data entries corresponding to the specified items;

among said retrieved entries comparing information associated with like topics;

[[and]]

constructing one or more natural language sentences that reflect results of said retrieving and said comparing, by steps including:

providing a plurality of natural language sentence templates, whereby each possible combination of a topic and category of items is associated with a particular template, and

inserting names, topics and values resulting from said comparing into appropriate respective fields in an appropriate one of said templates; and

presenting said natural language sentences to a user at a display;

wherein said constructing further includes combining a plurality of said statements having at least one item in common into a sentence, using connective words

appropriate to the comparison-based relation between the respective statements; and

wherein said constructing further includes -

providing a library of connective phrases;

selecting one or more phrases from said library at random; and
concatenating a plurality of sentences that relate to a common category, whereby they
are augmented by said selected phrases.

24. (Currently Amended) A program storage device readable by a computer,
~~tangibly embodying~~ having embodied in a computer readable medium a program of
instructions executable by the computer to perform method steps for supplying
comparative information about at least two specified items out of a group of items
belonging to any one category, each item of the group having a corresponding data
entry in the computer's storage, the data entry including a name, at least one topic and
information associated with each topic, said information including at least one value,
the method steps comprising:

retrieving from storage data entries corresponding to the specified items;
among said retrieved entries comparing information associated with like topics; and
constructing one or more natural language sentences that reflect results of said
retrieving and said comparing, by steps including:

providing a plurality of natural language sentence templates, whereby each possible
combination of a topic and category of items is associated with a particular template,
and

inserting names, topics and values resulting from said comparing into appropriate
respective fields in an appropriate one of said templates;

wherein -

any topic is associated with a range of values, extending between two extreme values,
and with a numerical scale whose minimum and maximum values correspond to
respective extreme values of the range, such a topic being a fuzzy topic;

in any data entry, the information associated with any fuzzy topic includes a position number within the respective scale, which number corresponds to a value within the respective range; and

said comparing includes, with respect to any fuzzy topic, comparing the respective position numbers;

wherein said comparing includes, with respect to any fuzzy topic, finding among said retrieved entries the highest and lowest position values, dividing the values between them into one or more identifiable subranges, associating each item with one of said subranges according to the corresponding position value and grouping all items according to their associated subranges, noting their respective names and noting for each group its respective subrange and the common topic; and

wherein any fuzzy topic is further associated with a set of relational words, appropriate to its range of values, and wherein said constructing includes constructing, for any noted topic, natural language statements containing noted names, and relational words that reflect positions of respective noted subranges relative to each other or relative to said highest and lowest position values or relative to said scale.

25. (Currently Amended) A program storage device readable by a computer, ~~tangibly embodying~~ having embodied in a computer readable medium a program of instructions executable by the computer to perform method steps for supplying comparative information about at least two specified items out of a group of items belonging to any one category, each item of the group having a corresponding data entry in the computer's storage, the data entry including a name, at least one topic and

information associated with each topic, said information including at least one value,
the method steps comprising:

retrieving from storage data entries corresponding to the specified items;

among said retrieved entries comparing information associated with like topics; and

constructing one or more natural language sentences that reflect results of said

retrieving and said comparing, by steps including:

providing a plurality of natural language sentence templates, whereby each possible
combination of a topic and category of items is associated with a particular template,

and

inserting names, topics and values resulting from said comparing into appropriate
respective fields in an appropriate one of said templates;

wherein said constructing further includes combining a plurality of said statements

having at least one item in common into a sentence, using connective words

appropriate to the comparison-based relation between the respective statements; and

wherein said constructing further includes -

providing a library of connective phrases;

selecting one or more phrases from said library at random; and

concatenating a plurality of sentences that relate to a common category, whereby they
are augmented by said selected phrases.

26. (Currently Amended) A computer program product comprising a computer
useable readable medium having computer readable program code embodied therein
for supplying comparative information about at least two specified items out of a
group of items belonging to any one category, each item of the group having a
corresponding data entry in the computer's storage, the data entry including a name, at

least one topic and information associated with each topic, said information including at least one value, the computer program product comprising:

computer readable program code for causing the computer to retrieve from storage data entries corresponding to the specified items;

computer readable program code for causing the computer to compare, among said retrieved entries, information associated with like topics; and

computer readable program code for causing the computer to construct one or more natural language sentences that reflect results of said retrieving and said comparing, by steps including:

providing a plurality of natural language sentence templates, whereby each possible combination of a topic and category of items is associated with a particular template, and

inserting names, topics and values resulting from said comparing into appropriate respective fields in an appropriate one of said templates;

wherein -

any topic is associated with a range of values, extending between two extreme values, and with a numerical scale whose minimum and maximum values correspond to respective extreme values of the range, such a topic being a fuzzy topic;

in any data entry, the information associated with any fuzzy topic includes a position number within the respective scale, which number corresponds to a value within the respective range; and

said comparing includes, with respect to any fuzzy topic, comparing the respective position numbers;

wherein said comparing includes, with respect to any fuzzy topic, finding among said retrieved entries the highest and lowest position values, dividing the values between

them into one or more identifiable subranges, associating each item with one of said subranges according to the corresponding position value and grouping all items according to their associated subranges, noting their respective names and noting for each group its respective subrange and the common topic; and wherein any fuzzy topic is further associated with a set of relational words, appropriate to its range of values, and wherein said constructing includes constructing, for any noted topic, natural language statements containing noted names, and relational words that reflect positions of respective noted subranges relative to each other or relative to said highest and lowest position values or relative to said scale.

27. (Currently Amended) A computer program product comprising a computer useable readable medium having computer readable program code embodied therein for supplying comparative information about at least two specified items out of a group of items belonging to any one category, each item of the group having a corresponding data entry in the computer's storage, the data entry including a name, at least one topic and information associated with each topic, said information including at least one value, the computer program product comprising:

computer readable program code for causing the computer to retrieve from storage data entries corresponding to the specified items;

computer readable program code for causing the computer to compare, among said retrieved entries, information associated with like topics; and

computer readable program code for causing the computer to construct one or more natural language sentences that reflect results of said retrieving and said comparing, by steps including:

providing a plurality of natural language sentence templates, whereby each possible combination of a topic and category of items is associated with a particular template, and

inserting names, topics and values resulting from said comparing into appropriate respective fields in an appropriate one of said templates;

wherein said constructing further includes combining a plurality of said statements having at least one item in common into a sentence, using connective words appropriate to the comparison-based relation between the respective statements; and

wherein said constructing further includes -

providing a library of connective phrases;

selecting one or more phrases from said library at random; and

concatenating a plurality of sentences that relate to a common category, whereby they are augmented by said selected phrases.